

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 7. This sheet, corrects the position of the lines from reference number 4 as required by the Office to illustrate the shock receiving surface. No new matter is added.

REMARKS

Drawings

Applicant requests that the Office to acknowledge the Drawing Office review of the drawings as noted in the Office Action Summary.

Claim Rejections – 35 USC § 103

According to the MPEP §2143.01, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art."

A useful presentation for the proper standard for determining obviousness under 35 USC §103(a) can be illustrated as follows:

1. Determining the scope and contents of the prior art;
2. Ascertaining the differences between the prior art and the claims at issue;
3. Resolving the level of ordinary skill in the pertinent art; and
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

The Office has quoted the statute from 35 USC 103(a), which is referenced herein. The Office has rejected claim 5, 6, 9 & 14 as being unpatentable over US Patent No. 5,033,593 issued to Kazuhito in view of obvious common knowledge and US Patent No. 6,679,967 issued to Carroll, III et al.

The applicant respectfully wishes to rebut the Office's allegation with respect to the applicant's previous response and the Office's allegations of obviousness of modifications of the '593 reference as they were related by the office to claim 6. The Office's allegations related

specifically to modifications to the '593 references which the applicant had previously rebutted as an anticipatory reference. Furthermore, the applicant respectfully submits that the Office's allegations in the previous Office Action, were merely that, allegations unsubstantiated by argumentation or logic, and were not alleged by the Office to be Official Notice, instead taking the form of a summary or conclusory statement based on the arguments made by the Office above, and rebutted by the applicant. The applicant specifically disputed the Office's allegation on page 5 of the response referred to by the Office. The applicant respectfully submits that while the Office has reiterated its argument the form of Official notice, now evidently directed to claim 5, the Office's allegations are not much more specific than those of the previous Office Action. The Office does not allege what modifications would be required to the '593 reference to obtain the claimed invention, merely alleging that modification according to the claims would be within the skill level of one skilled in the art and would be dependent upon desired crush characteristics. In particular, as the Applicant notes below, the '593 reference fails to disclose the claimed invention either alone or in combination with the other cited references, and the unidentified modifications alleged by the Office to be obvious design choices would not supply the deficiencies of the cited references.

The Office therefore appears to dismiss the configuration of the claimed invention as merely a design choice to obtain desired crush characteristics. The applicant respectfully submits that this very structure having those crush characteristics is itself an important distinction from the cited references. Indeed, it is among the applicant's contentions that the desired characteristics, and their particularly advantageous achievement in a "sweet spot" is patentably distinct from the cited references. The applicant submits that the claimed invention provides uniform shock absorption properties, and this is attributable to the claimed configuration which is provided with substantially uniform wall thickness, a parting line disposed between the opposing notches, and a plurality of recessed grooves spaced substantially equally in the first and second walls.

In contrast to the claimed invention, the cited reference fails to disclose a having the structural configuration claimed by the claimed invention. When configured as recited, the claimed

invention provides highly uniform shock absorption properties. Claim 5 is recited below for the office's convenience.

Claim 5 (Currently Amended): A vehicle shock absorber having first and second ends, said shock absorber comprising:

opposing first and second walls;

said first wall disposed apart from said second wall;

a shock receiving surface at said first end connecting said first and second walls;

a plurality of recessed grooves spaced substantially equally disposed in said first and second walls, and substantially perpendicular to said shock receiving surface; and said recessed grooves extending from said shock receiving surface to said second end, such that **a plurality of notches are formed in the shock receiving surface wherein a parting line disposed between notches formed by recessed grooves disposed in said first wall and notches formed by recessed grooves disposed in said second wall**, and the recessed groove in the second wall is provided at a position opposed to a wall surface between two adjacent recessed grooves formed in the first wall so that the recessed grooves formed in the first wall and recessed grooves formed in the second wall are disposed alternately, and a distance (a) from a lower end of a recessed groove in a first wall to a second wall is made equal to a distance (b) from the lower end of the recessed groove in the first wall to a lower end of the recessed groove in the second wall;

Said vehicle shock absorber being hollow and blow molded of thermoplastic.

As noted in the previous office action response, the cited '593 reference provides a square tube that has opposing corrugated sides. As illustrated in Figure 3 of the cited reference, the configuration of the cited reference provides a high degree of flexibility. This flexibility is attributable to the corrugations of the opposing walls surface and allows for deflection of the member. This lack of rigidity can be attributed to the structure of the '593 reference, that of a tube with corrugated sides. As noted in the previous Office Action response, the '593 reference discloses a continuous corrugated wall, and thus does not disclose recesses interspersed between sections of wall, with other recesses opposed to the intermediate sections of wall, as claimed in

claim 5. The corrugations provide a flexibility tough as desirable in '593 reference that is quite undesirable in the claimed invention. As illustrated in Figure 3 of the '593 reference, the flexibility is quite substantial when an impact is made to the face of the recited structure. The applicant will not belabor points made in the previous response, but notes that this structure is clearly distinct from the cited reference.

The Office truthfully acknowledges that the cited reference fails to disclose:

recessed groove in the second wall is provided at a position **opposed to a wall surface between two adjacent recessed grooves formed in the first wall so that the recessed grooves formed in the first wall and recessed grooves formed in the second wall** are disposed alternately, and a distance (a) from a lower end of a recessed groove in a first wall to a second wall is made equal to a distance (b) from the lower end of the recessed groove in the first wall to a lower end of the recessed groove in the second wall. . .

The Office alleges that this is supplied by official notice of the prior Office Action allegedly acquiesced to by the applicant. As noted above, the cited statement by the Office, even if constituting official notice, was addressed not to claim 5 but claim 6. The Applicant notes that while one can select a pattern of alternating ribs, the structural advantages of such an arrangement, and the selection of one such structure over another, and in many instances does, constitute patentable subject matter. The Office further attempts to bolster its arguments with the citation of Figures 14-17 of the '976 reference. The applicant submits that even a cursory review of these figures reveals that they fail to disclose the claimed structure. The applicant notes that all the honey comb shapes are formed in the same wall. The honey comb shapes are made within the body of the structure and are made by the proposed method whereby they are imparted their impact absorption characteristics. The proposed combination simply would not have produced the claimed invention.

The applicant respectfully submits that one of ordinary skill in the art would not have combined the cited references, not have has any reason to make the combination as the '593 reference specifically is configured for flexibility, while that for the '967 reference is not. Consequently, the combination the Office makes, is not such a one as one skilled in the art would be inclined to

make. The mere closer spacing of the cited references is not enough to produce the claimed invention's important structural relationship.

The Office has rejected claims 7 & 10-13 as being unpatentable over the '593 reference, as twice modified, as applied to claim 5 above, and further in view of US Patent No. 5,382,051 issued to Glance. The Office relies on the arguments made in relation to the preceding claims, supplementing them with the teachings of the '051 reference to provide a blow molded shock absorber. The applicant respectfully submits that the structure of the '051 reference is clearly distinct from the claimed invention, and while it may be blow molded, does not disclose the claimed invention. The applicant further respectfully submits that the hydroforming is not directly analogous to blow molding. The applicant above rebuts the Office's allegations with respect to the cited '593 and '967 references and at least for the above reasons, claims 1 and 10-13 are patentably distinct from the cited references alone or in combination

The Office has rejected claim 8 as being unpatentable over '593 reference, as twice modified, as applied to claim 5 above, and further in view of US Patent No. 3,995,901 issued to Filbert, Jr. et al. The applicant will not reiterate those arguments made at length above with respect to the '593 reference and the '967 reference, but respectfully submits that that combination has been rebutted. The applicant notes that the Office relies upon the '901 reference only to disclose a vehicle shock absorber disposed between the bumper beam and the bumper fascia. The applicant respectfully submits that the '901 reference fails to provide any of the elements noted by the Applicant as absent from the above discussed references. The applicant respectfully submits that at least for those reasons discussed above, claim 8 is patentably distinct from the cited references, either alone or in combination.

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,

/Andrew P. Cernota, Reg. No. 52,711/

Cus. No. 24222
Vern Maine & Associates
PO Box 3445
Nashua, NH 03061-3445
Tel. No. (603) 886-6100, Fax. No. (603) 886-4796
patents@vernmaine.com

Vernon C. Maine, Reg. No. 37,389
Andrew P. Cernota, Reg. No. 52,711
David A. Rardin, Reg. No. 52,153
Attorneys/Agents for Applicant